



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/135,183	08/17/1998	CYNTHIA C. BAMDAD	A-65909-1/RF	8993

7590 12/16/2003

RICHARD F TRECARTIN
FLEHR HOHBACH TEST ALBRITTON AND HERBERT
SUITE 3400
FOUR EMBARCADERO CENTER
SAN FRANCISCO, CA 941114187

EXAMINER

MARSCHER, ARDIN H

ART UNIT	PAPER NUMBER
----------	--------------

1631

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/135,183

Examiner

Ardin Marschel

Applicant(s)

BAMDAD, CYNTHIA C.

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 11, 14 and 23-44 is/are pending in the application.
~~45) Of the above Claim(s) 3-10, 12, 13, & 15-22 have been canceled. State withdrawn from consideration~~
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 23-32, 34 and 36-39 is/are rejected.
- 7) ☒ Claim(s) 14, 33, 35, & 40-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/22/03 has been entered.

Applicants' arguments, filed 9/22/03, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

VAGUENESS AND INDEFINITENESS

Claims 29-32, 37, and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29 and 30 cite the phrase "said label probe" which lacks antecedent basis as no label probe is cited in either of claim 1, for example, from which they depend. Clarification via clearer claim wording is requested.

Claims 31 and 32 cite the phrase "said assay complex" which lacks antecedent basis as no assay complex is cited in claim 1, for example, from which they depend. Clarification via clearer claim wording is requested.

Claim 37, line 2, cites a capture probe but fails to clearly define whether this is the capture probe in claim 11 from which it depends or another capture probe.

Clarification via clearer claim wording is requested. This same unclarity is present in instant claim 38.

PRIOR ART

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 11, 23-30, 34, 36, 37, and 39 are rejected under 35 U.S.C. 102(e)(2) as being clearly anticipated by Kayyem et al. (P/N 6,090,933).

This rejection is maintained and reiterated from the previous office action, mailed 4/9/03, as well as applied to certain newly submitted claims. Applicants argue that the target nucleic acid in the Kayyem et al. citation lacks a covalently attached electron transfer moiety (ETM) as also diagrammed in the top diagram on page 10 of the REMARKS, filed 9/22/03. In response, the ETM in said top diagram of Kayyem et al. is covalently attached to a probe which is in turn hybridized to the target. Therefore there is a covalent attachment of the ETM. Consideration of the covalent attachment limitation in instant claims 1 and 23 reveals that there is no limitation as to what specifically the covalent bonding is directed to, or, whether the attachment is without

Art Unit: 1631

any intermediate bonding such as hybridization or not. Therefore, instant claims 1 and 23 are reasonably interpreted as inclusive of the Kayyem et al. covalent attachment practice which is disclosed in a complex where hybridization also occurs. The presence of the hybridization between probe and target does not negate the presence of covalent attachment of the ETM to the assemblage within the scope of instant claims 1 and 23. Therefore, the above argument of applicants is non-persuasive. Applicants then argue that the Kayyem et al. compositions lack a recruitment linker which is not hybridized to the target. In response, the topmost diagram is again referred to on page 10 of applicants' REMARKS, filed 9/22/03. In this diagram a covalent linkage line is clearly seen between the ETM and the second probe. This illustrates what is reasonably a recruitment linker which is non-nucleic acid as instantly claimed. Specifically exemplified recruitment linkers link the ETM as shown in Figures 29A and 29B of Kayyem et al. as a triple bond carbon-carbon linkage to the ferrocene ETM moiety. Other recruitment linkers are shown in Figures 32B in Kayyem et al. Thus, this argument of applicants is also non-persuasive.

Newly submitted claims 29 and 36 are included as rejected above due to the presence of electron transfer moieties along the entirety of the probe/target complex which participate in electron transfer during target detection.

CLAIM OBJECTIONS

Claims 14, 33, 35, and 40-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1631

No claim is allowed.

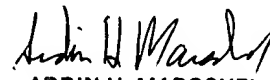
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

December 12, 2003


ARDIN H. MARSCHEL
PRIMARY EXAMINER